Patent claims for the USA:

1. A thrombin preparation which comprises a noncovalently binding inhibitor as stabilizer.

2. A thrombin preparation stable in the liquid state as claimed in claim 1, which comprises besides a soluble calcium salt and sodium chloride as stabilizers

   - a buffer substance,
   - a sugar or sugar alcohol and/or an amino acid and/or
   - a salt of a mono- or polycarboxylic acid or
   - a salt of a mono- or polyhydroxycarboxylic acid.

3. A process for producing a thrombin preparation, which comprises a prothrombin obtained from plasma or a plasma fraction being, after activation to thrombin and, where appropriate, further processing steps, purified by a hydrophobic interaction chromatography.

4. The process for producing a thrombin preparation as claimed in claim 3, wherein the prothrombin employed for activation to thrombin is subjected to a virus inactivation or reduction during its production.

5. The process for producing a thrombin preparation as claimed in claim 3, wherein the thrombin is subjected, before or after the chromatographic purification, also to an additional inactivation or reduction of viruses.

6. The process as claimed in claim 3, wherein a cation exchanger chromatography is also carried out in addition before or after the hydrophobic interaction chromatography.

7. The process as claimed in claim 3, wherein the thrombin preparation is adjusted to a pH of from 5.0 to 8.0.

8. The process as claimed in claim 3, wherein besides a soluble calcium salt and sodium chloride as stabilizers

   - a buffer substance,
   - a sugar or sugar alcohol and/or an amino acid and/or
   - a salt of a mono- or polycarboxylic acid or
   - a salt of a mono- or polyhydroxycarboxylic acid,

   are added to the thrombin preparation.

9. The process as claimed in claim 3, wherein a substance inhibiting the thrombin activity is added as stabilizer.

10. The process as claimed in claim 9, wherein benzamidine or p-aminobenzamidine is added as substance inhibiting the thrombin activity.

11. The process as claimed in claim 3, wherein a gel with coupled hydrophobic radicals is employed as absorbent for the hydrophobic interaction chromatography.

12. The process as claimed in claim 11, wherein the hydrophobic radicals of the gel employed as absorbent are phenyl radicals or ligands of similar hydrophobicity.

13. The process as claimed in claim 3, wherein the thrombin preparation is filtered through a membrane with a suitable pore size to remove viruses.

14. A thrombin preparation, which is obtainable by the process of claim 3.

15. The use of the thrombin preparation of claim 1 as hemostatic, constituent of a hemostatic or as constituent of tissue glue.

16. The use of the thrombin preparation of claim 2 as hemostatic, constituent of a hemostatic or as constituent of tissue glue.

17. The use of the thrombin preparation of claim 14 as hemostatic, constituent of a hemostatic or as constituent of tissue glue.